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EXAMINER	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LALIT K. MESTHA, YAO RONG WANG, and
KENNETH J. MIHALYOV

Appeal No. 2007-3681
Application No. 10/000,379
Technology Center 1700

Decided: March 4, 2008

Before TERRY J. OWENS, JENNIFER D. BAHR and DAVID B. WALKER, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

The Appellants appeal from a rejection of claims 1-5. Claims 6-19, which are all of the other pending claims, stand withdrawn from consideration by the Examiner.

THE INVENTION

The Appellants claim a method for processing transient errors produced in a color measurement system. Claim 1 is illustrative:

1. A method of processing transient errors produced in a color measurement system monitoring a color producing process, the method comprising:

implementing a model of the color producing process;

monitoring an input to the color producing process;

predicting an expected color signal based on the model and the monitored input;

measuring an output color produced by the color producing process to produce a measured color signal;

comparing the measured color signal to the expected color signal to produce a color error value, and;

selectively replacing the measured color signal based on the color error value.

THE REFERENCES

Stokes	US 5,612,902	Mar. 18, 1997
Wolf	US 6,222,648 B1	Apr. 24, 2001

Raja Balasubramian and Martin S. Malz (Balasubramian), "Refinement of printer transformation using weighted regression", 2658 *SPIE* 334-40 (Aug. 1996).

THE REJECTIONS

The claims stand rejected as follows: claims 1-3 under 35 U.S.C. § 102(a) or (e) over Wolf, and claims 4 and 5 under 35 U.S.C. § 103 over Wolf in view of Balasubramian and Stokes.

OPINION

We reverse the Examiner's rejections.

Rejection of claims 1-3

We need to address only claim 1, which is the sole independent claim.

The Examiner has the initial burden of establishing a prima facie case of anticipation by pointing out where all of the claim limitations appear in a single

reference. *See In re Spada*, 911 F.2d 705, 708 1657 (Fed. Cir. 1990); *In re King*, 801 F.2d 1324, 1327 (Fed. Cir. 1986).

Wolf discloses "a method and apparatus for calibrating, and periodically maintaining the calibration of, the colors printed by a document output terminal" (col. 1, ll. 11-13). Wolf treats a printer plus its color compensator mapping MAP1 as a single system which he calls an "extended printer" (col. 5, ll. 53-55). Wolf constructs MAP1 by selecting a high density set of L*a*b* color coordinate grid points that span the printer color gamut and experimentally determining, online and only once, the mapping from requested L*a*b* to printed L*a*b* (col. 5, ll. 57-64). That mapping is done by requesting a color patch to be printed at each grid point and measuring the colorimetric coordinates of each printed patch. *See id.* Then, to provide a correction for MAP1, a low density mapping MAP2 for the extended printer is constructed by selecting a low density set of L*a*b* grid points and experimentally determining, online and periodically, the mapping from L*a*b* requests sent to the extended printer to printed L*a*b* (col. 6, ll. 1-7, 55-56). That mapping is done by requesting a color patch to be printed at each of the low density grid points and measuring the colorimetric coordinates of each printed patch (col. 6, ll. 1-7). During printer operation MAP2 converts the requested L*a*b* to L*a*b* coordinates sent as a request to the extended printer, MAP1 converts that L*a*b* request to L*a*b* coordinates sent to the printer, and the printer prints the requested color (col. 6, ll. 16-26). Together, MAP1 and MAP2 provide color calibration and compensation for slow drift of the printer (col. 6, ll. 55-58).

Regarding the claim 1 limitation "comparing the measured color signal to the expected color signal to produce a color error value" the Examiner argues that "Wolf essentially compares the measured color signal (output from

Densitometer/spectrophotometer 70) with input or expected signal (RcGcBc) to produce a transformation value which is an error signal" (Ans. 6).

Wolf's signal $R_cG_cB_c$ is the input signal from the document creator (10) (fig. 1). Thus, that signal corresponds to the Appellants' monitored input. The Appellants' claim 1 requires predicting an expected color signal based on a model of the color producing process and a monitored input. Because Wolf's input signal $R_cG_cB_c$ is not based on a model of the color producing process, it cannot correspond to the Appellants' expected color signal. Hence, the Examiner has not established that Wolf discloses "comparing the measured color signal to the expected color signal to produce a color error value" as required by the Appellants' claim 1.

Regarding the claim 1 limitation "selectively replacing the measured color signal based on the color error value" the Examiner argues that "[s]ince correcting one of the inputs or tables in Wolf results in a replacement of the signal, the structures of Wolf meet the replacement function limitation" (Ans. 5).

Wolf does not replace the color signal measured by densitometer/spectrophotometer 70 (fig. 1). Wolf compares that color signal to input color signal $R_cG_cB_c$ and, based upon that comparison, converts the L*a*b* coordinates of the input color signal to L*a*b* coordinates sent to the extended printer (col. 5, ll. 19-25; col. 6, ll. 18-21; fig. 1). Thus, the Examiner has not established that Wolf discloses "selectively replacing the measured color signal based on the color error value" as required by the Appellants' claim 1.

The Examiner, therefore, has not established a prima facie case of anticipation of the inventions claimed in the Appellants' claim 1 and its dependent claims 2 and 3.

Rejection of claims 4 and 5

The Examiner does not rely upon Balasubramian or Stokes for any disclosure that would have rendered prima facie obvious, to one of ordinary skill in the art, the above-discussed claim requirements missing from Wolf (Ans. 4-5).

Hence, the Examiner has not established a prima facie case of obviousness of the inventions claimed in the Appellants' claims 4 and 5.

DECISION

The rejections of claims 1-3 under 35 U.S.C. § 102(a) or (e) over Wolf and claims 4 and 5 under 35 U.S.C. § 103 over Wolf in view of Balasubramian and Stokes are reversed.

REVERSED

JRG

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